



Performance Pays. Proven.

## Premier's Performance Pays Study

A proven relationship between cost and quality

Frank Johnson, Regional Vice President  
Premier Healthcare Informatics

Pay for Performance Summit, Los Angeles, CA  
February 15, 2007



# The Cost/Quality Debate

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Clinical Quality and Financial Performance are Inseparable



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## Hospital Quality Incentive Demonstration - HQID

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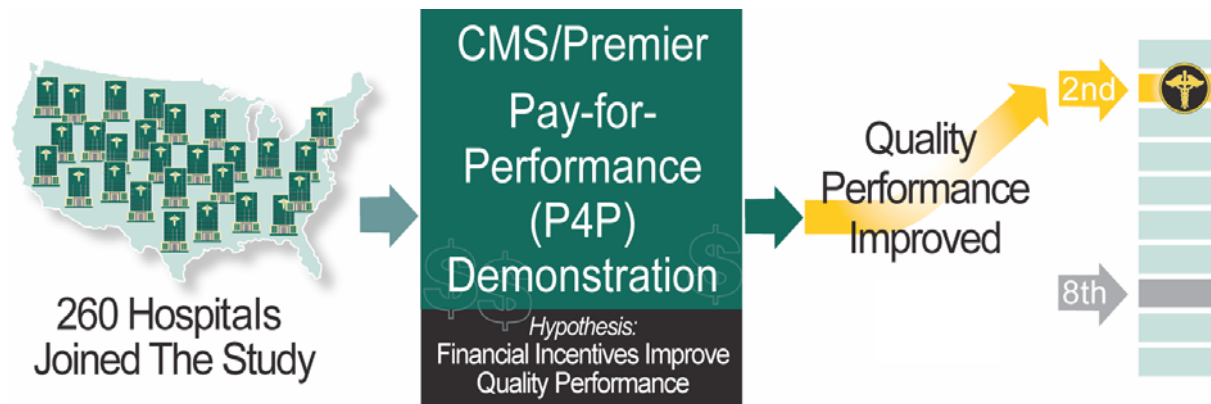
# CMS/Premier Demo Pay for Performance

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In 2003, CMS partnered with Premier for the first national pay-for-performance demonstration for hospitals. Over 260 Premier hospitals volunteered.

## Hypothesis

Financial Incentives improve hospital quality performance



## Findings

- **Focus on Quality** - The P4P Program financial incentives did focus hospital executive attention on measuring quality and refining care processes according to the study infrastructure.
- **Premier is the Change Agent** - The Premier Infrastructure and measurements were actually the change agents in focusing quality improvement efforts. The more hospitals were monitored, the better performance improved over time.

# Participant Characteristics

- **Urban, rural, all size populations ..**
  - 40% > 1 million population
  - 24% < 100,000 population
- **Teaching hospitals approximately 25%**
- **Licensed operational bedsizes range from 25 to >1000 with an average of 351 beds**

# Measuring Quality Performance

Over 400,000 patient discharges

Five high-volume clinical conditions for which measures of quality exist:

1. Acute myocardial infarction (AMI)
2. Coronary artery bypass graft (CABG)
3. Heart failure (HF)
4. Community acquired pneumonia (PN)
5. Hip and knee replacement surgery (Hip/Knee)

Nationally recognized quality measures

- Consensus among national organizations, e.g.
  - JCAHO, CMS, NQF, AHRQ, Leapfrog, Hospital Quality Alliance

# Premier's Role

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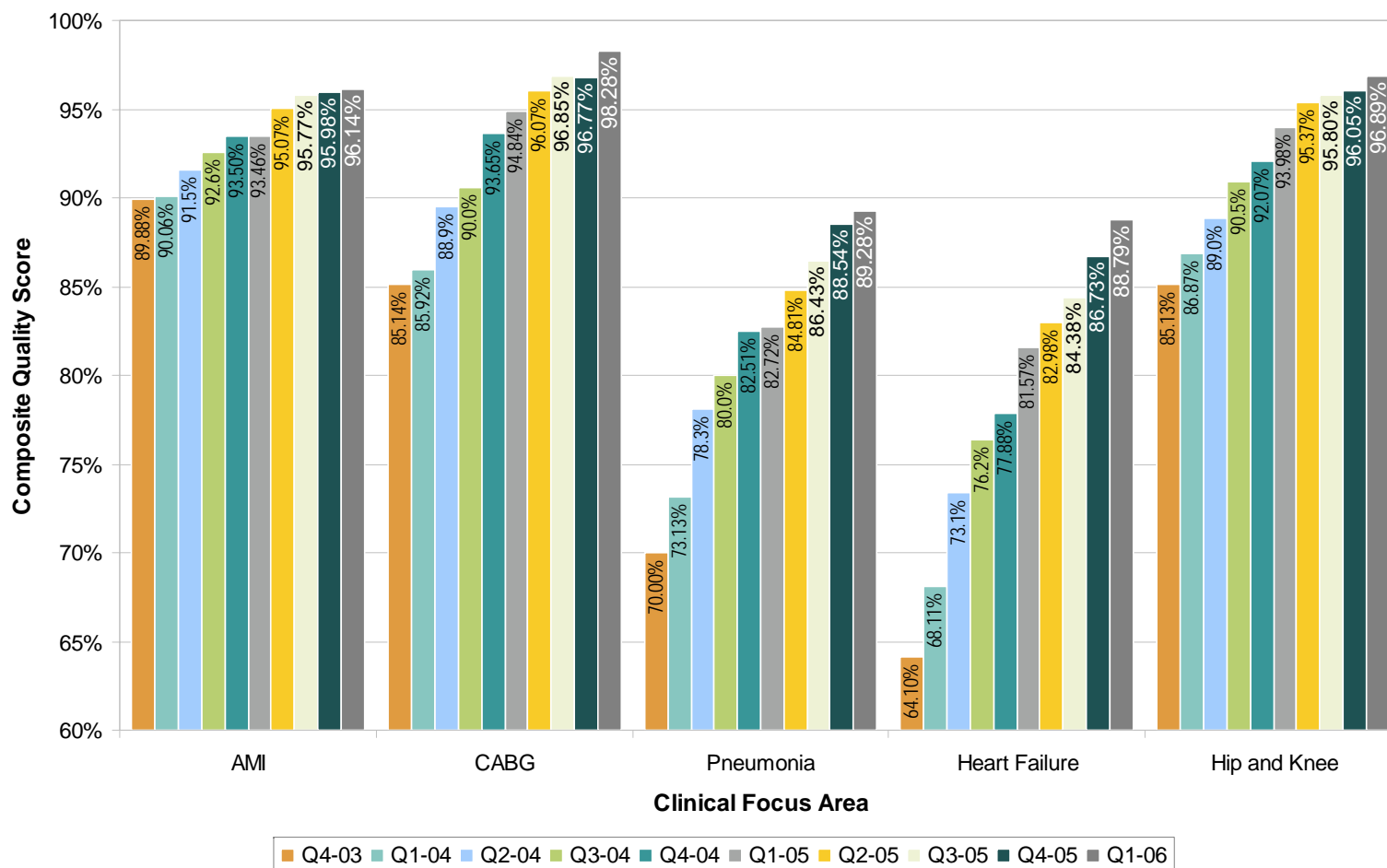
- Participate in design of pay-for-performance program
- Collect and analyze results
- Benchmark status of all hospitals in study
- Identify hospital's opportunities for improvement
- Document and disseminate best practices and implementation tools among participants
- Assist participants in executing best practices

# Dramatic and Sustained Improvement

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## Composite Quality Score

Trend of Quarterly Median (5th Decile) by Clinical Focus Area  
 October 1, 2003 - March 31, 2006 (Year 1 Final Data, Year 2 and Yr 3 YTD Preliminary)





# HQID Year 2 - Final Results

Released January 26, 2007

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- Quality improvement across all hospitals and clinical areas
- HQID raised overall quality by 11.8% in 2 years
- Quality incentive payments of \$8.7 Million paid to 115 hospitals
- AMI improvements saved 1,284 AMI patients
- Patients received ~150,000 add'l treatments
- Premier P4P hospitals quality scores are higher than national average - 85% compared to 79%

**The New York Times** **Business**

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SP

MEDIA & ADVERTISING WORLD BUSINESS YOUR MONEY DEALBOOK MARKETS COMP

## Bonus Pay by Medicare Lifts Quality

By REED ABELSON

Paying a hospital to do the right thing is a lot harder than it looks.

[Enlarge This Image](#)



Aaron Houston for The New York Times

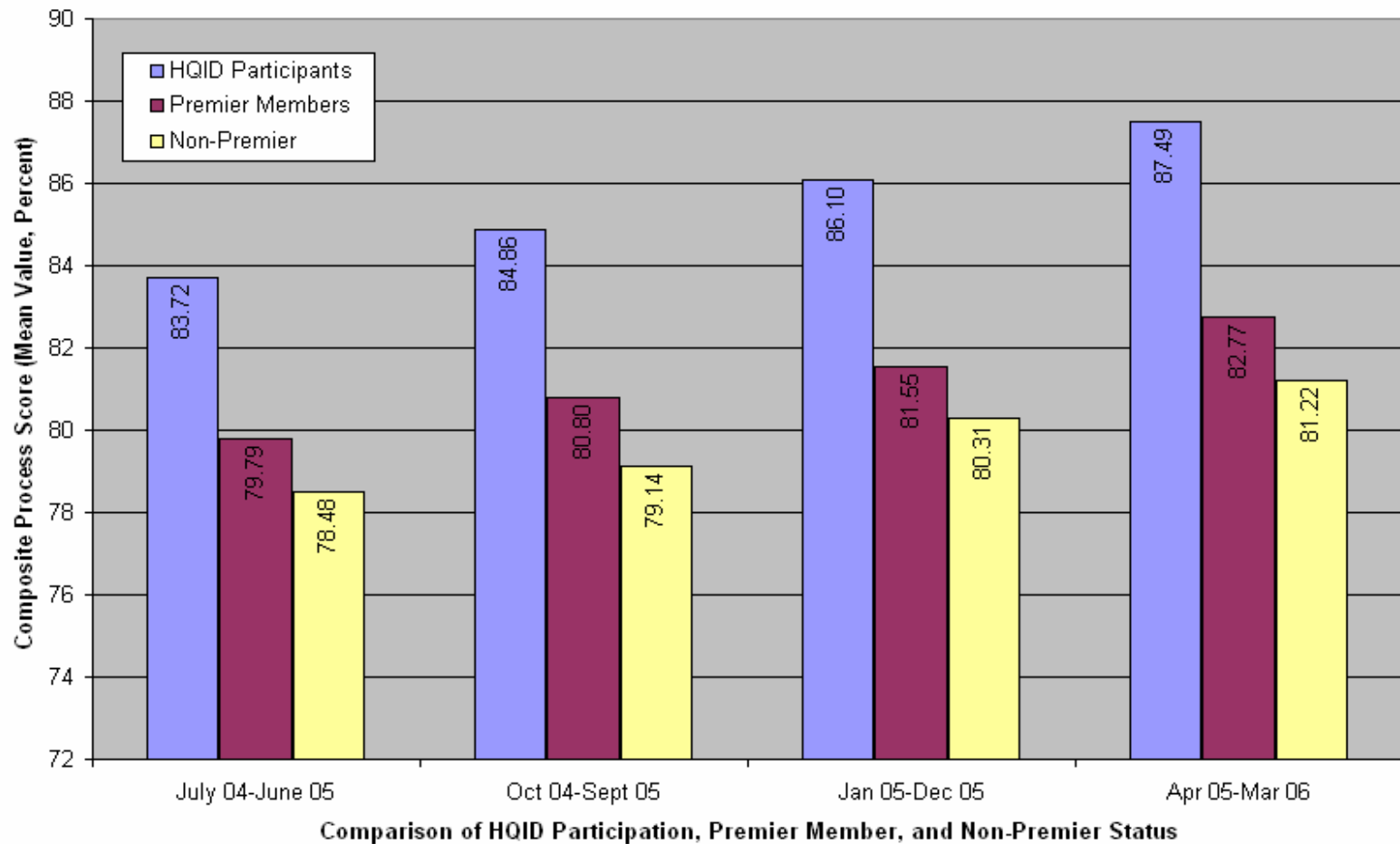
The 266 hospitals participating in a Medicare experiment that pays them more to follow medical recommendations have steadily improved the quality of patient care.

The latest results in the three-year experiment show that more heart attack patients are getting aspirin when they arrive at the hospital, for example, and more patients are getting vaccinated against pneumonia.

# HQID Participants Compared to Others

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Premier Engagements Compared to National Group Trend  
Hospital Compare Data  
18 Process Measures Aggregated to Overall Composite Process Score



# Example of decile movement (by year)

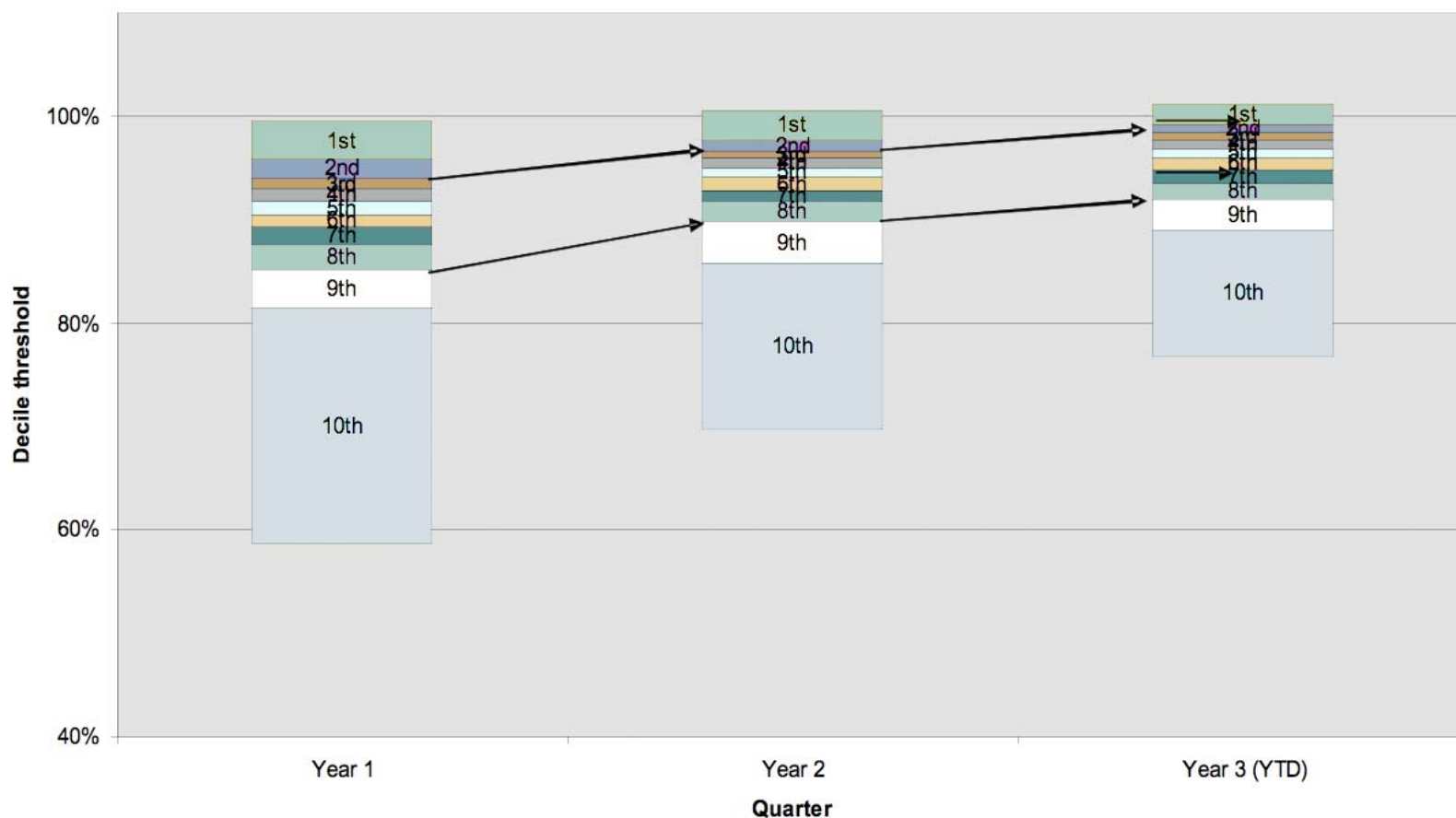
## AMI Composite Quality Score Decile Threshold Change

**CMS/Premier Hospital Demonstration Project:**

October 1, 2003 - March 31, 2006

Year 1 Final Data, Year 2 Preliminary Data Q4-05 and Q1-06

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# Premier/CMS HQID Extension

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- Project granted 3 year extension, with one year of committed funding
- Extension is limited to current participants
- Proposed payment structure will provide financial incentives, based on threshold achievement, significant improvement and top performance
- Opportunity to test new measures and clinical focus groups - ex. AHRQ patient safety measures and COPD
- Reward sharing guidelines are included in terms



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## Lessons Learned from Top Performers

 **PREMIER**

# The “How’s”

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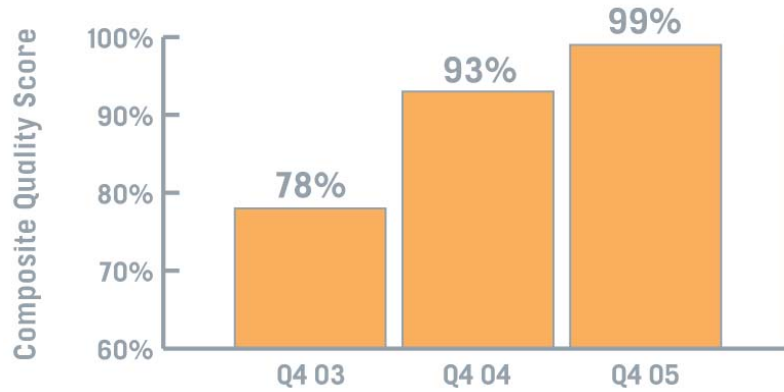
- “Quality” core value of institution
- Priority of executive team
- Physician engagement
- Improvement methodology
- Prioritization methodology
- Dedicated resources
- Committed “knowledge transfer”



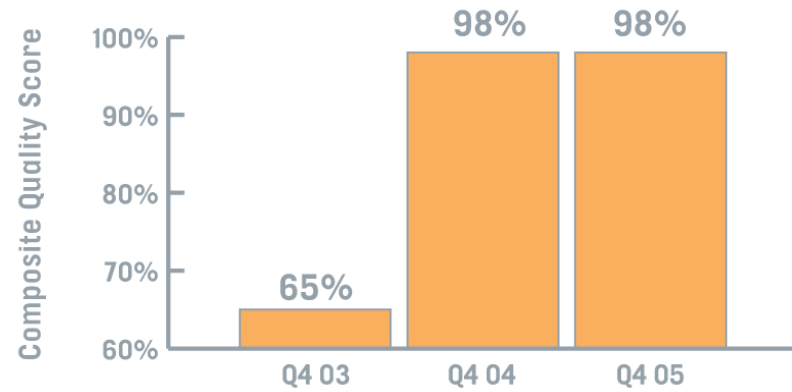
Cleveland Regional Medical Center  
Carolinas HealthCare System

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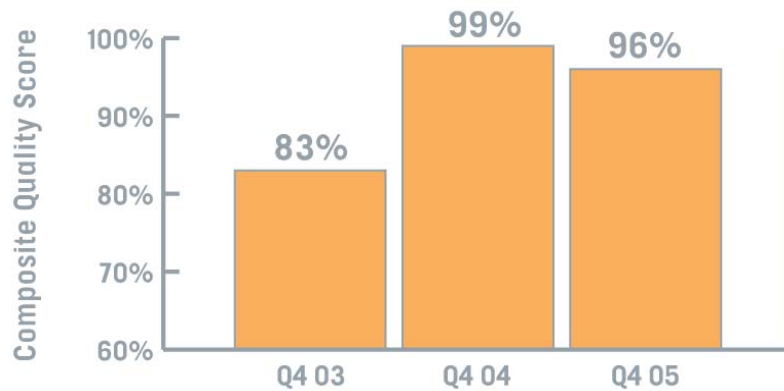
**ACUTE MYOCARDIAL INFARCTION**



**HEART FAILURE**



**HIP AND KNEE**

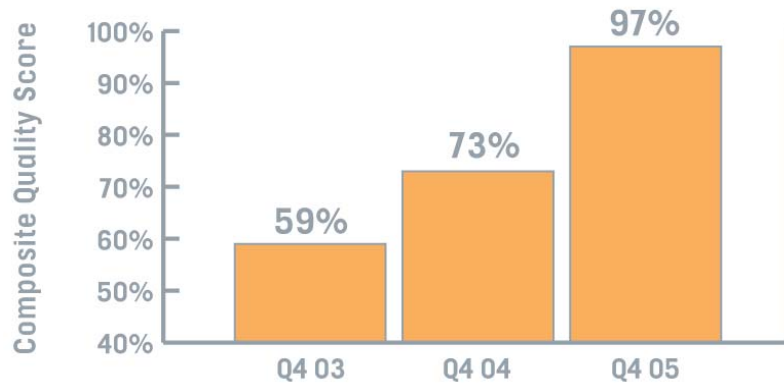


Quality a core value, executive priority, physician engagement, improvement methodology, prioritization methodology, dedicated resources, committed knowledge transfer

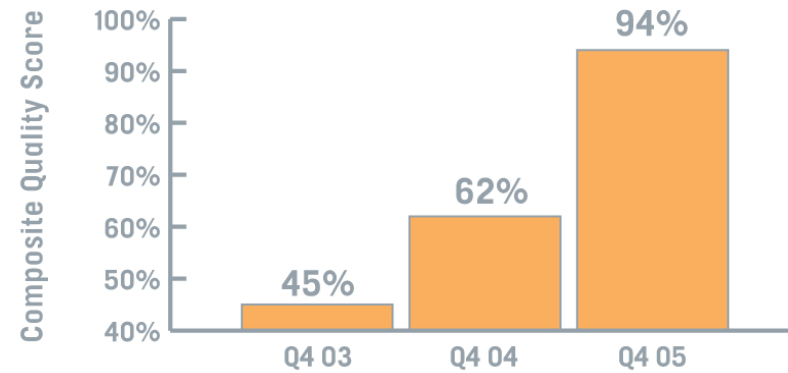


Performance Pays. Proven.

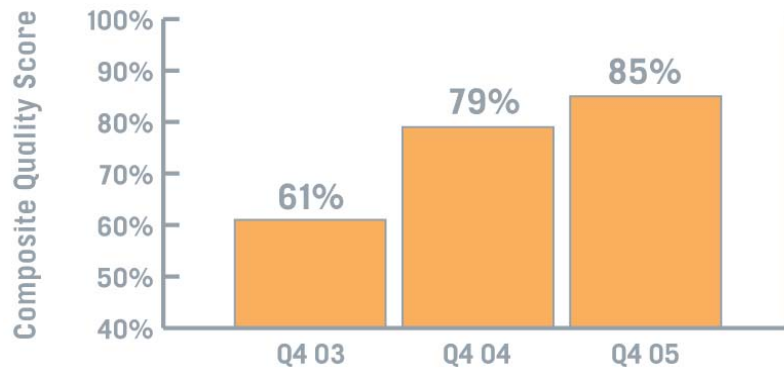
**ACUTE MYOCARDIAL INFARCTION**



**HEART FAILURE**



**PNEUMONIA**

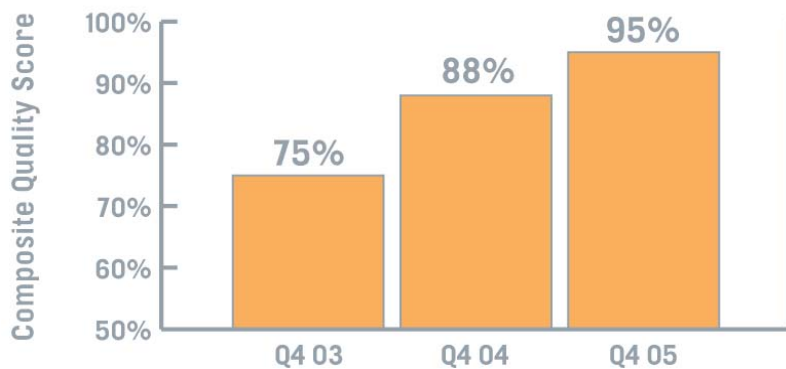


Quality a core value, executive priority, physician engagement, improvement methodology, prioritization methodology, dedicated resources, committed knowledge transfer

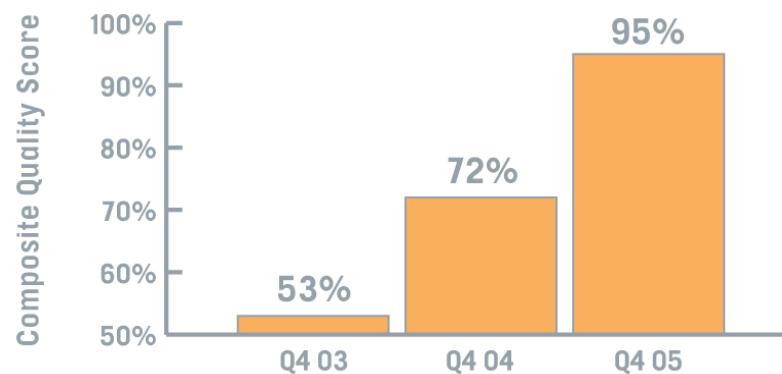


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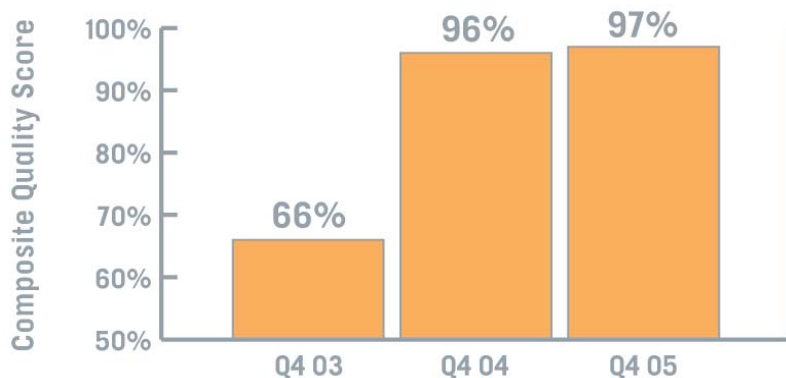
**ACUTE MYOCARDIAL INFARCTION**



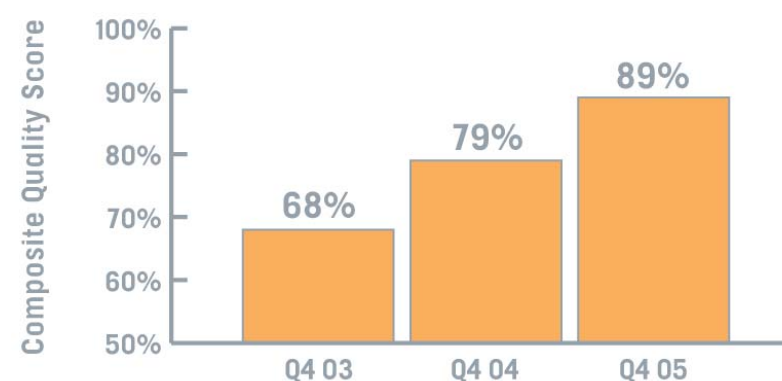
**HEART FAILURE**



**HIP AND KNEE**



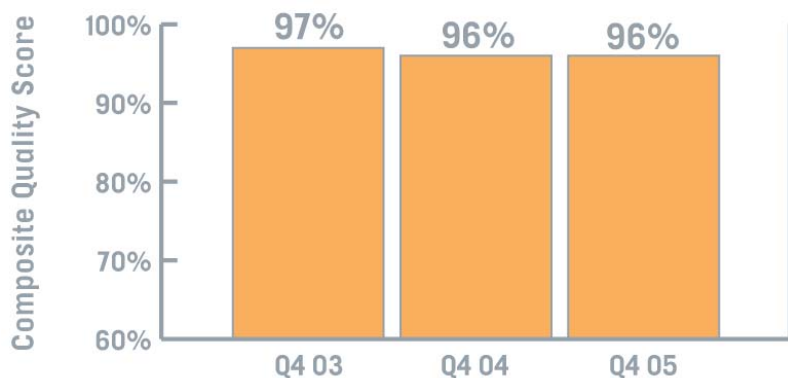
**PNEUMONIA**



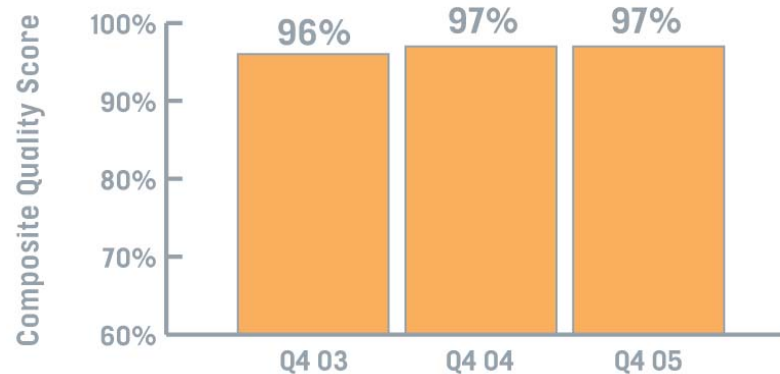
Quality a core value, executive priority, physician engagement, improvement methodology, prioritization methodology, dedicated resources, committed knowledge transfer

Performance Pays. Proven.

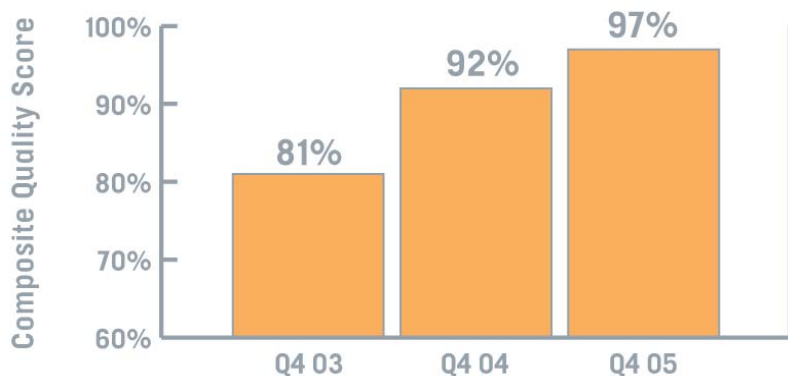
### ACUTE MYOCARDIAL INFARCTION



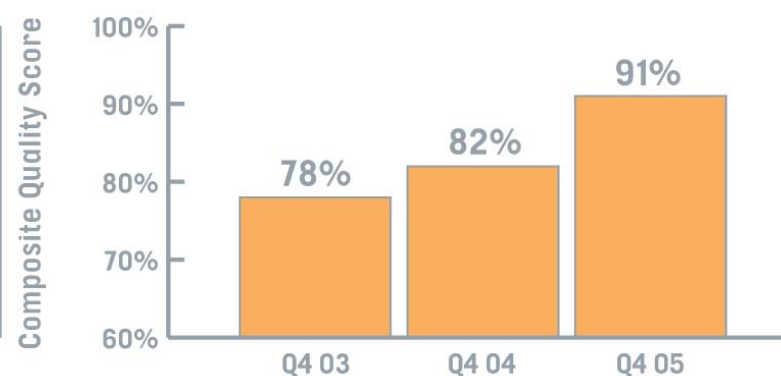
### CORONARY ARTERY BYPASS GRAFT



### HIP AND KNEE



### PNEUMONIA



Quality a core value, executive priority, physician engagement, improvement methodology, prioritization methodology, dedicated resources, committed knowledge transfer



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## Performance Pays

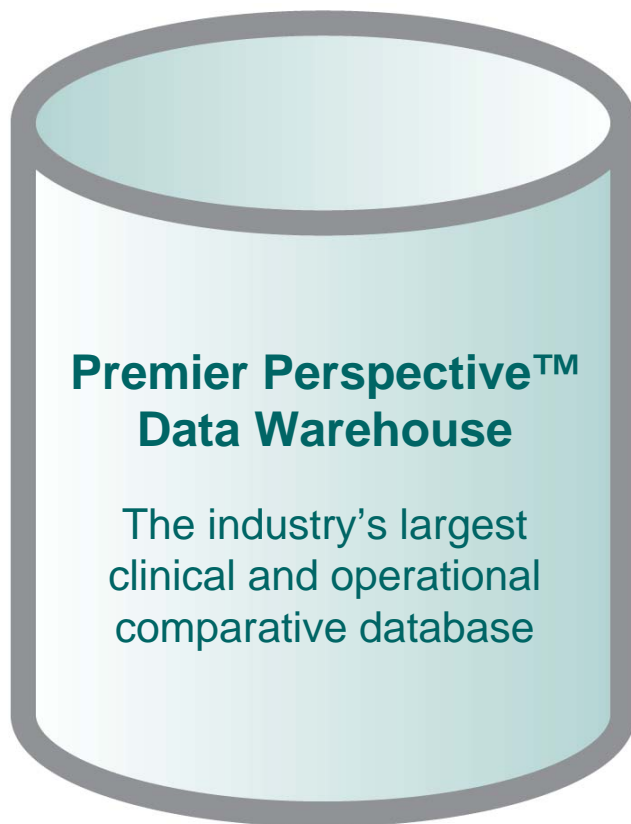
First significant study showing the association between more reliable care and lower cost

The Premier logo consists of a teal inverted triangle above the word 'PREMIER' in a bold, black, sans-serif font.

**PREMIER**

# Performance Pays Study

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## **Over 223,000 Medicare Patients Studied Evidence-based Care Processes Studied**

- Quality measures from CMS/Premier P4P demonstration
- Industry-supported, uncomplicated measures

## **Cost and Outcome Elements Studied**

- Total hospital cost for patient
- Mortalities
- Patient readmission and complications
- Patient length of stay in hospital

## **Five High-volume Diagnosis Areas Studied**

- Pneumonia
- Heart Bypass Surgery
- Hip and Knee Surgery
- Acute Myocardial Infarction - AMI
- Heart Failure

# “Performance Pays” Key Findings

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## Improving patient care in key clinical areas:

- Reduces Costs
- Saves Lives
- Reduces Complications
- Reduces Readmissions
- Shortens Length of Stay

# Measuring Reliable Care

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Examples:



## Care Measures

M1	M2	M3	M4	M5	M6	M7	PPM*
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	100%

“HIGH”  
100%



## Care Measures

M1	M2	M3	M4	M5	M6	M7	PPM*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	71%

“MEDIUM”  
50% - 99%



## Care Measures

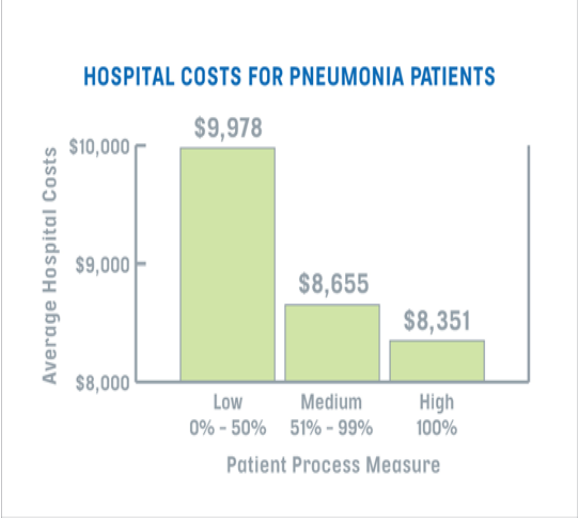
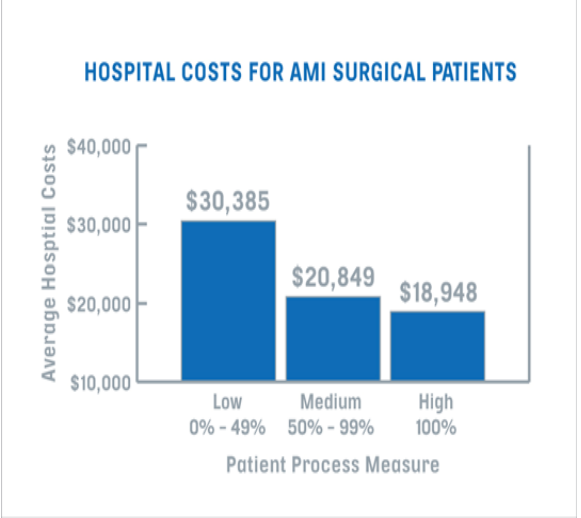
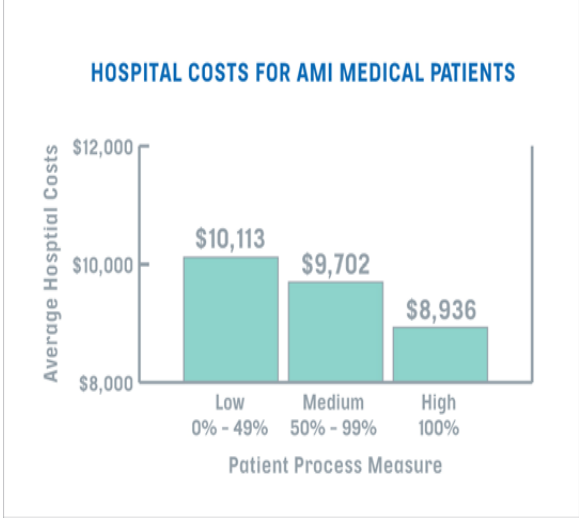
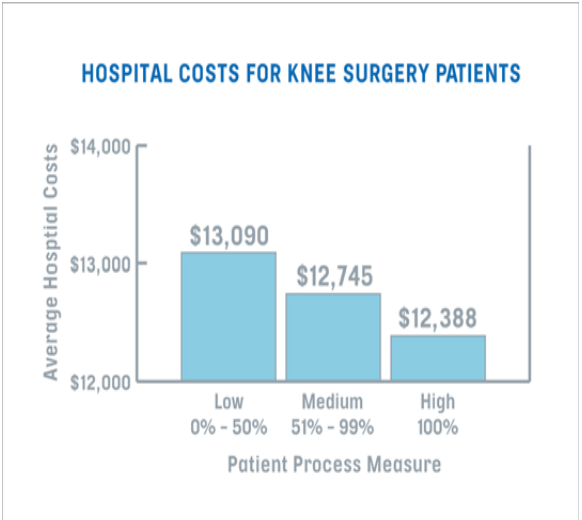
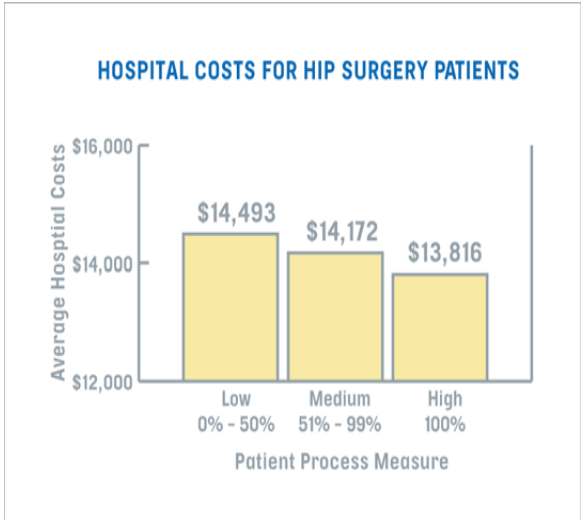
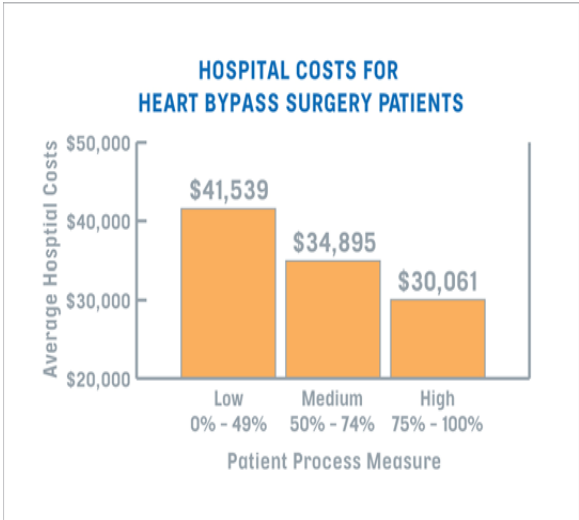
M1	M2	M3	M4	M5	M6	M7	PPM*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	43%

“LOW”  
0% - 49%

\* Patient Process Measure

# Finding 1: Hospital Costs

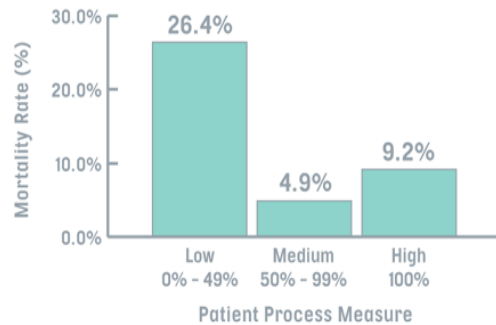
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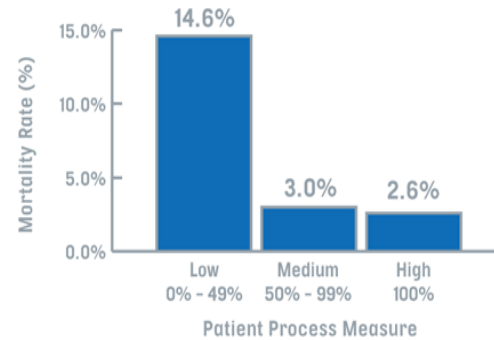
# Finding 2: Mortality

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**MORTALITY RATE FOR AMI MEDICAL PATIENTS (%)**

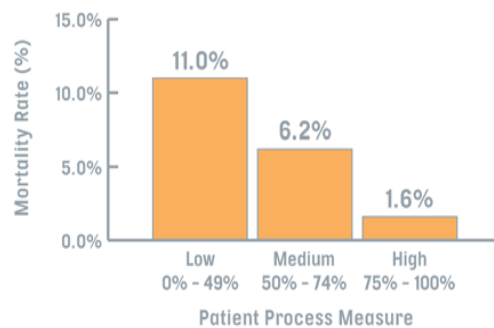


**MORTALITY RATE FOR AMI SURGICAL PATIENTS (%)**

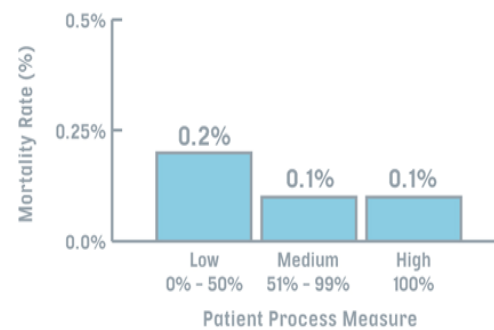


The complexity of the pneumonia condition, where other conditions are present, requires additional research before conclusions can be drawn.

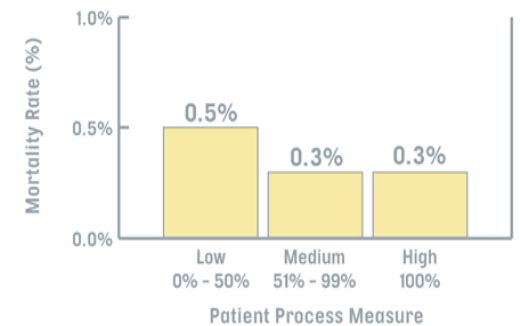
**MORTALITY RATE OF HEART BYPASS SURGERY PATIENTS (%)**



**MORTALITY RATES OF KNEE SURGERY PATIENTS (%)**



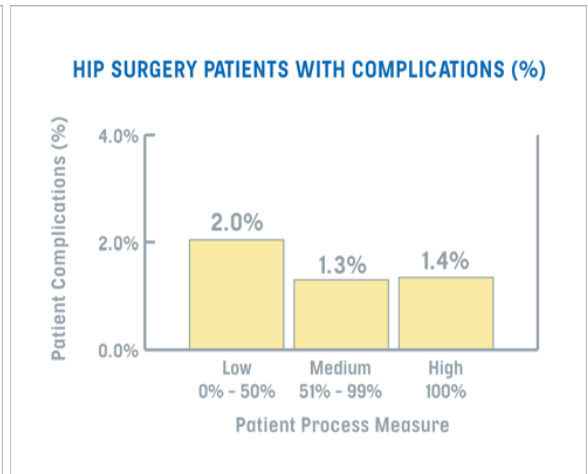
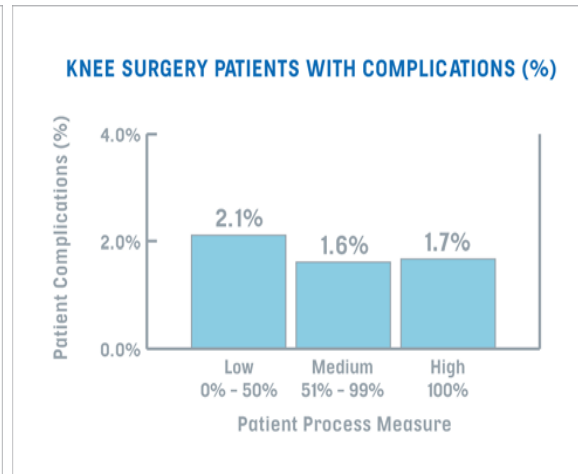
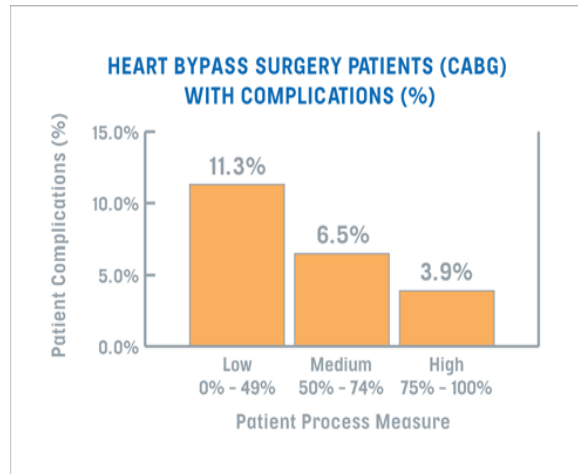
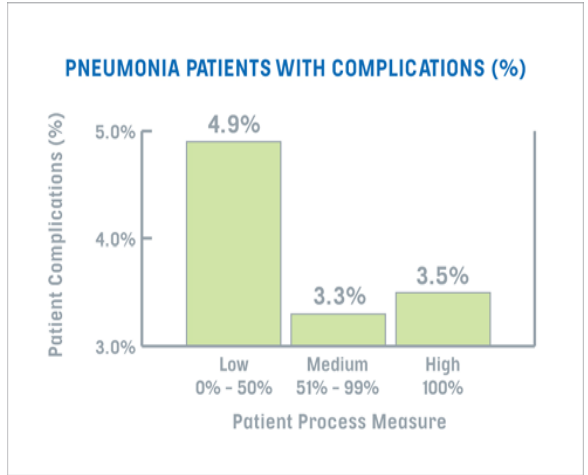
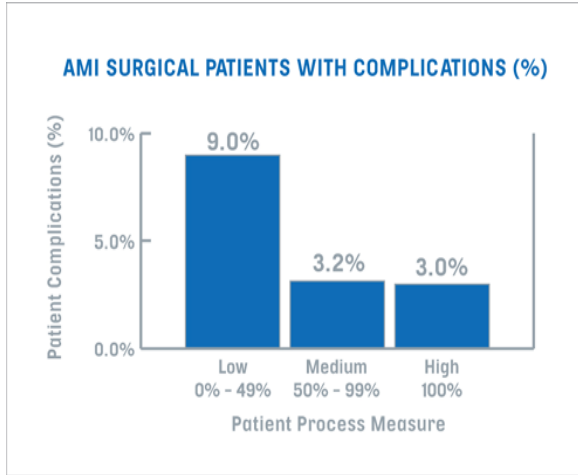
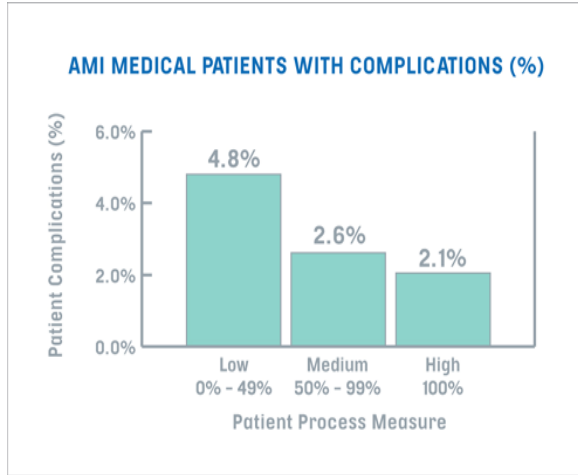
**MORTALITY RATE OF HIP SURGERY PATIENTS (%)**





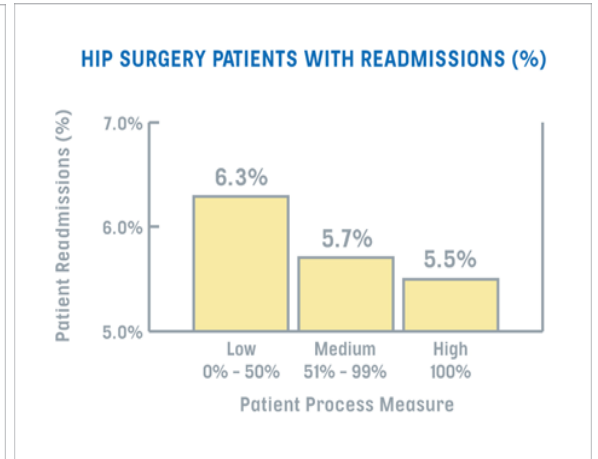
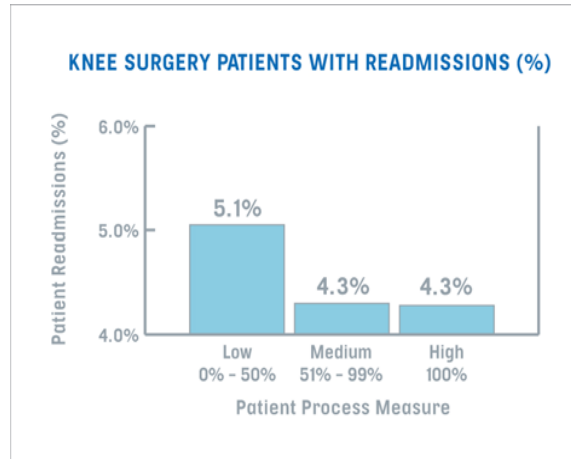
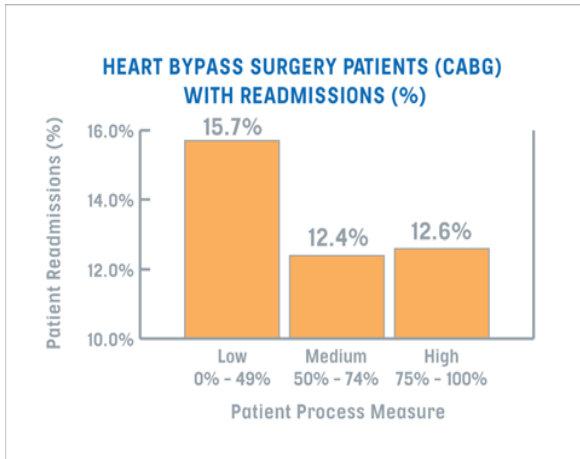
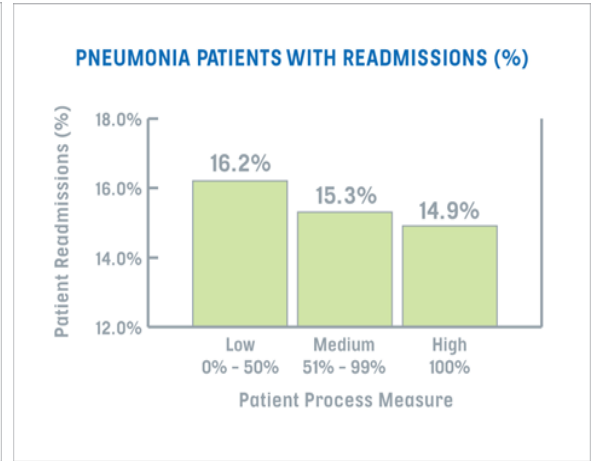
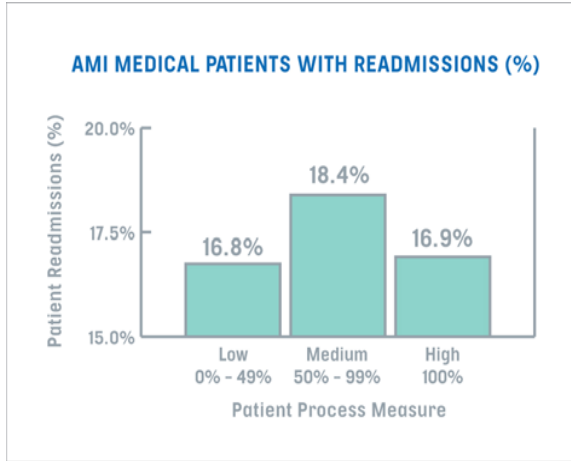
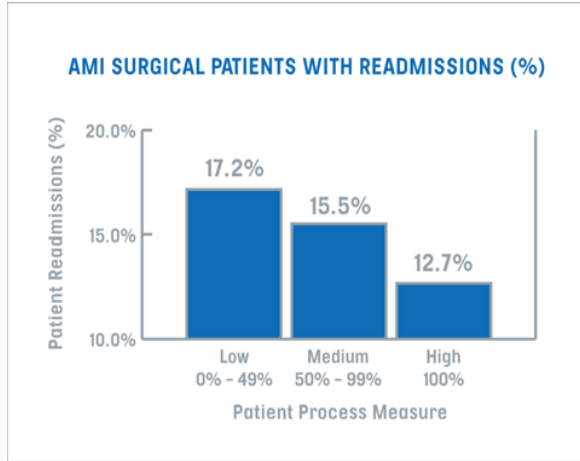
# Finding 3: Complications

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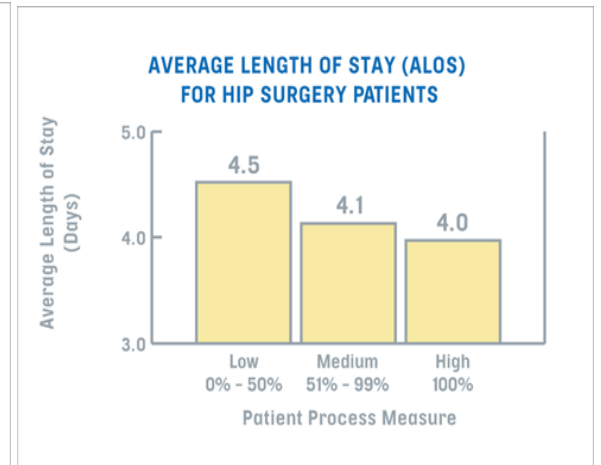
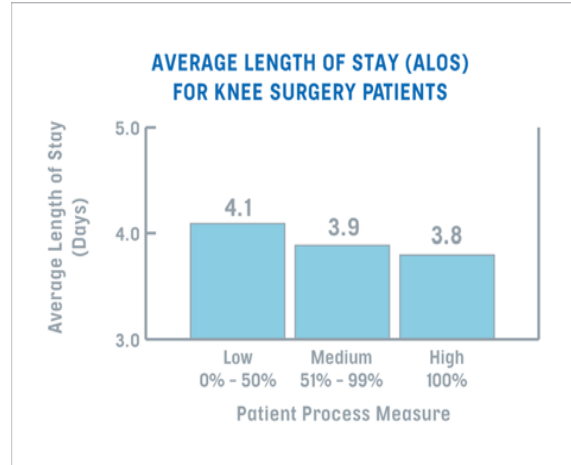
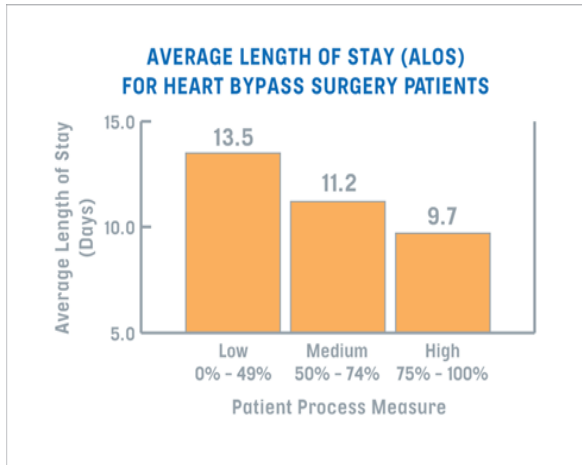
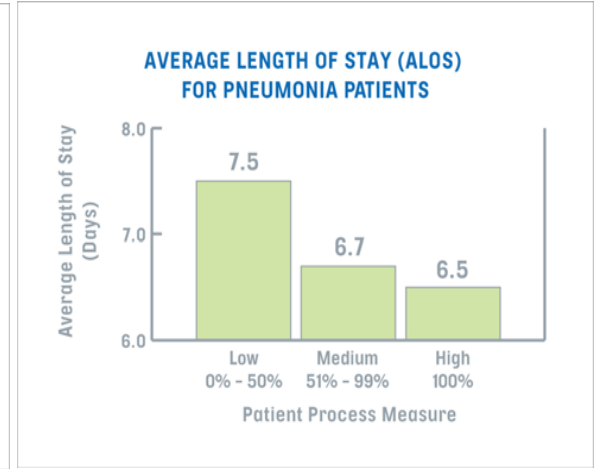
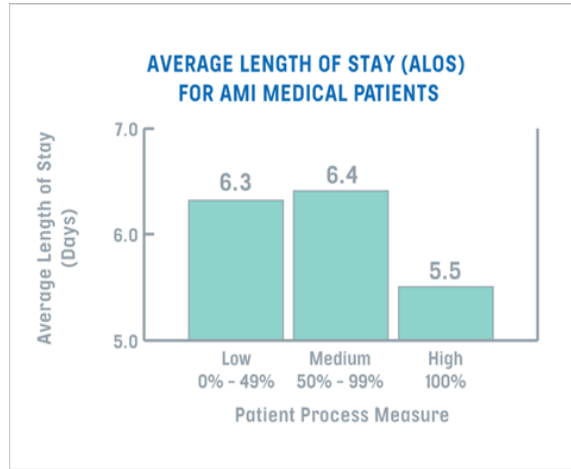
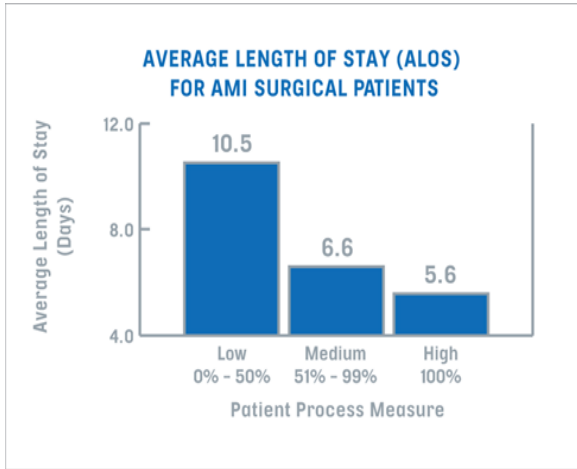
# Finding 4: Readmissions

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# Finding 5: Length of Stay

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## Implications

Estimating the Improvement Opportunity

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# Improvement Opportunity

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For Pneumonia, Heart Bypass Surgery, Hip and Knee Surgery, and  
AMI Patients  
in One Year Alone

\$1.4 Billion

6,000 Avoidable Deaths

6,000 Complications

10,000 Readmissions

800,000 Days

# Studying the Cost/Quality Connection

The Premier Performance Pays Study is the first significant study showing the association between more reliable care and lower costs. It studies the cost and outcomes associated with patients receiving more reliable care

## “Reliably Delivering Care Measures Saves Lives”

"The main point is that the majority of hospitals in the HQID project, even those on the lower end of the scale, improved their quality of care across the board with respect to reliable use of scientifically based practices. Hospitals want to offer high quality care; sometimes they just need to be pointed in the right direction. The HQID project has offered hospitals a guideline to improve their patient care. This study was conducted with a very strong clinical, quality and cost database from Premier. Such a database helps you to study your own care and identify opportunities for improvement."

**Donald M. Berwick, MD, MPP, FRCP**

*President and CEO, Institute for Healthcare Improvement. Clinical Professor of Pediatrics and Healthcare Policy, Harvard Medical School*

## “Better Care Improves Affordability”

This is important early evidence regarding a question that is central to the sustainability of both public and private health benefits plans, whether efforts to improve quality actually improve or worsen the affordability of care.

The predominant answer emerging from these results could not be more encouraging - better care can indeed improve affordability.

Arnold Milstein MD, MPH

*US Healthcare Thought Leader, Mercer Health and Benefits, Medical Director at Pacific Business Group on Health, MedPAC Commissioner*



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## What's ahead?

Legislative and Regulatory Activity -  
Establishing the Base for Linking Payment  
to Quality

  
**PREMIER**

# Recent Legislative and Regulatory Actions

## Effective FY, 2007

- Number of quality measures expanding
- Increased penalty for not reporting all measures

## 1<sup>st</sup> phase of 3 year DRG refinement beginning FY, 2007

- Reimbursement based on hospital cost to charge ratios
- Refine classification to account for differences in patient severity

## Planned implementation FY, 2008

- Identify secondary diagnoses present on admission
  - Distinguish co-morbidities from avoidable complications
  - Reduction in reimbursement for selected complications

## Development of hospital value-based reimbursement plan for implementation in fiscal year 2009

- Development of pay-for-performance (“value-based”) reimbursement



# Premier P4P Readiness Program

Join hundreds of hospital leaders in Premier's Pay-for-Performance (P4P) Readiness Program to prepare for the coming changes in the reimbursement environment and understand the impact of quality on patient outcomes and a hospital's bottom line.


## P4P Readiness Program includes:

- Performance Pays Study Results
- Web Seminars and Lessons on Quality and Cost Transparency
- P4P Readiness Weekly eNewsletter
- P4P Executive Forum
- P4P Readiness Program Online Calculator

**Thank you for using the Premier P4P Calculator**

Based on the quality measure data you submitted, the P4P Calculator processed:

- 1) Payment estimations** based on the estimated impact of pending Medicare reimbursement changes.
- 2) A quality of care assessment**, via the estimated appropriate care score (ACS) for each of the three conditions (acute myocardial infarction, heart failure, and pneumonia), as well as the estimated overall quality (ACS) for your organization.
- 3) Cost savings opportunity** for quality of care improvement.



**Payment Assessment – Estimated Impact of Pending Medicare Reimbursement Changes**

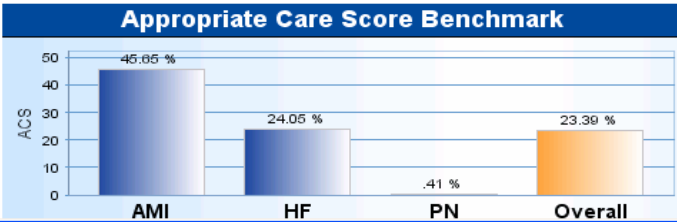
Based on your publicly available data in from the Fiscal Year 2004 Medicare Provider Analysis and Review (MedPAR) file, the following number is the estimated difference in Medicare reimbursement your facility would have received if the FY2007 Hospital Inpatient Prospective Payment Systems proposed regulations had been in place in FY 2004:

**+ \$904,651**

**Reliability and Quality of Care Assessment**

Based on the hospitals in our Premier Performance Pays study, we developed a relationship between a Composite Process Score (CPS) and Appropriate Care Score (ACS). Below is the Appropriate Care Score Benchmark for hospitals with similar CPS scores to your facility's.

**Appropriate Care Score Benchmark**



Condition	ACS Benchmark
AMI	46.65 %
HF	24.05 %
PN	.41 %
Overall	23.39 %

**What is the appropriate care score?**

The appropriate care score is the percentage of patients who received all intervention for which they were eligible.

Join Premier in this mission by enrolling in the P4P Readiness Program at [www.premierinc.com/P4P](http://www.premierinc.com/P4P)

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# Conclusion

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- It has been shown that financial incentives and public recognition can stimulate clinical quality performance improvement - P4P
- It has also been shown that the delivery of **more reliable care costs less** - "Performance pays"
- It is anticipated that some form of P4P reimbursement is on the horizon
- Premier has developed programs that allow hospitals to get started on the journey to quality today.



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## Questions and Answers

  
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